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A NEW GENUS OF STARFISHES FROM THE ALEUTIAN ISLANDS

By Austin H. Clark

During the summer of 1937, Dr. Victor B. Scheffer, of the United States Bureau of Biological Survey, made an unusually extensive collection of shallow-water echinoderms in the Aleutian Islands. Among the starfishes included were two very small 6-rayed individuals, one from Attu and the other from Amchitka, that at first sight appeared to represent a species of *Pteraster*. Closer examination revealed the fact that they are assignable to the Ganeriidae, although they are quite different from any of the other forms included in that family.

The family Ganeriidae includes the genera *Ganeria*, *Lebrunaster*, *Radiaster*, *Scotiaster*, *Cycethra*, *Kampylaster*, and *Leilaster*. Of these six genera two, *Radiaster* and *Leilaster*, are known only from the West Indies in water of from slight to great depth; all the others live in the Antarctic or immediately adjacent regions. It is especially interesting, therefore, to find a member of this family in the North Pacific.

ALEUTIASTER, new genus

Diagnosis.—A genus of Ganeriidae in which the superomarginals are absent; the inferomarginals, which are but little larger than the plates of the abactinal surface, are decumbent outwardly and broadly imbricating; and the actinal plates consist of a single row not quite reaching the arm tips, with a second irregular row traceable to about the middle of the arm; hexamerous.

Genotype.—*Aleutiaster schefferi*, new species.

Habitat.—Aleutian Islands; 1–7 fathoms.

Remarks.—At first I regarded *Aleutiaster* as most closely related to *Perknaster*, later deciding that its affinities were rather with *Cycethra*. I have never been able to examine a specimen of any species of *Perknaster*, which I know only from descriptions and figures.

Prof. Walter K. Fisher, who examined the two specimens of *Aleutiaster schefferi*, writes that he is of the opinion that *Aleutiaster* is a little nearer to *Perknaster* than to *Cycethra*—or possibly the three genera may be placed at the three apices of a triangle.

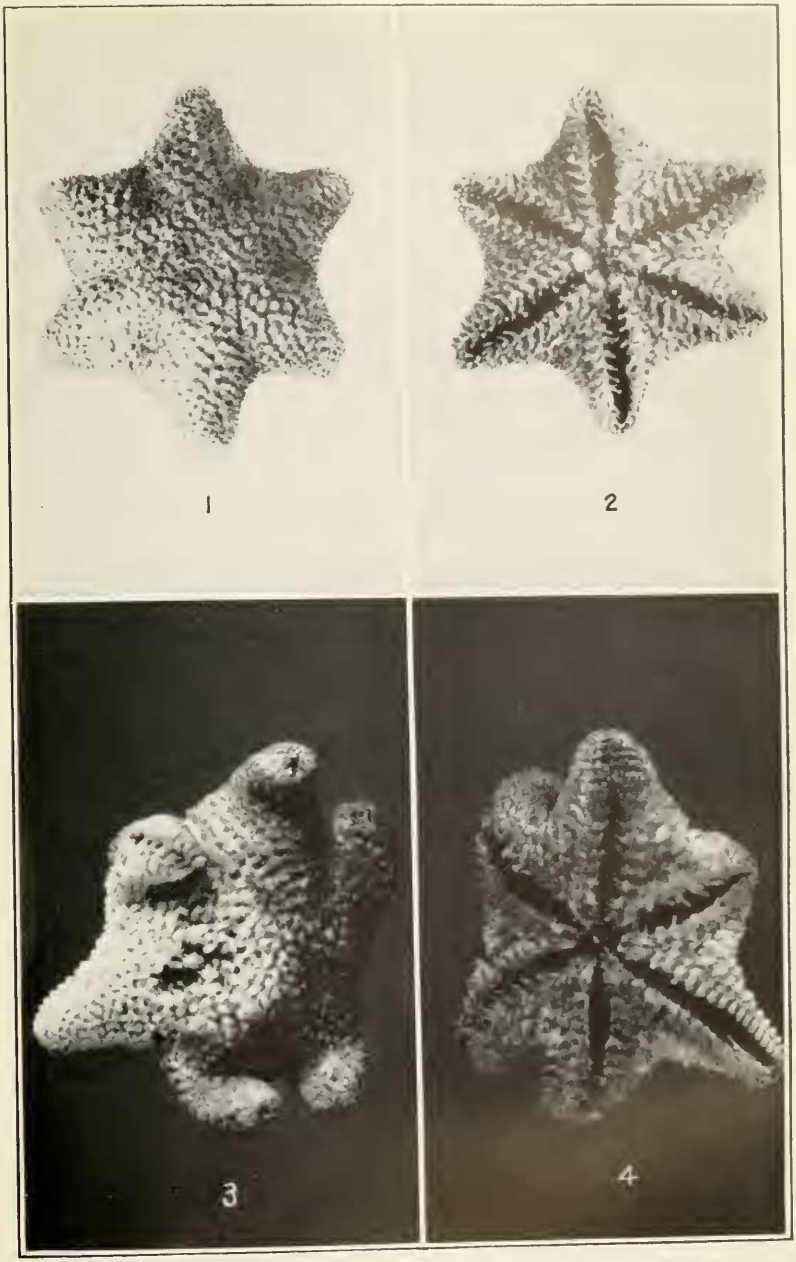
Both the specimens of the type species of *Aleutiaster* are very small and possibly immature, but their characters are so distinctive that even if the adults should prove to be much larger they will be readily recognizable.

ALEUTIASTER SCHEFFERI, new species

PLATE 57, FIGURES 1–4

Description.—A very small species with six short arms, perhaps better described as hexagonal with obtuse reentrant angles. The abactinal surface is elevated, having a somewhat inflated appearance, and the abactinal side passes over in a broad curve to the flat actinal surface. The entire animal is covered with a thick skin, which completely conceals the underlying plates. The spines are enclosed in skin sacks, and the adambulacral spine combs are webbed. The resemblance at first glance to a small *Pteraster* is striking. R=5 mm.; r=3.5 mm. R=about 1.4 r. Height at center, 3.5 mm. (=r).

The plates on the abactinal surface are very thin, scalelike, glassy, and very strongly imbricating. Those in the center are circular to broadly 4- or 5-lobed, or more or less elongate; those on the arms are broadly and roundedly wedge-shaped. Each plate has an abruptly thickened and roundedly elevated opaque portion that stands high up from the glassy scalelike base. This elevated portion is central on some of the plates on the disk, but on the plates on the arms it involves the adcentral half, or rather less; on these plates it is somewhat elongate transversely and commonly has a slightly concave thickened adcentral border. Interradially as the abactinal passes into the actinal surface the plates become elongate-triangular with the swollen narrow base away from the mouth. In the central portion of the abactinal surface the plates are somewhat irregular in arrangement, but on the arms they become arranged in diagonal lines. The greater portion of each plate is concealed beneath the plate following, so that the abactinal surface seems to be covered by the thickened and elevated portions of the plates, slightly



ALEUTIASTER SCHEFFERI, NEW GENUS AND SPECIES.

1, 2. The type specimen from Attu, abactinal (1) and actinal (2) sides. × 5.
3, 4. The specimen from Amchitka, abactinal (3) and actinal (4) sides. × 5. One ray has been denuded to show the plates.